DENTISTRY

Openventio PUBLISHERS

ISSN 2377-1623 Open Journal http://dx.doi.org/10.17140/DOJ-SE-1-e001

Special Edition
"Radiographic Interpretation as a Teaching Tool for Dental and Dental Hygiene Students"

Editorial

Corresponding author
Ashok Balasundaram, BDS, DDS, MDS, MS
Associate Professor
Department of Biomedical and Diagnostic Sciences
University of Detroit Mercy
School of Dentistry
Detroit, MI 48208, USA
E-mail: balasuas@gmail.com

Special Edition 1
Article Ref. #: 1000DOJSE1e001

Article History
Received: September 1st, 2015
Accepted: September 2nd, 2015
Published: September 2nd, 2015

Citation
Balasundaram A. Special edition on radiographic interpretation as a teaching tool for dental and dental hygiene students. *Dent Open J*. 2015; SE(1): e1-e2. doi: 10.17140/DOJ-SE-1-e001

Special Edition on Radiographic Interpretation as a Teaching Tool for Dental and Dental Hygiene Students

Ashok Balasundaram*

Associate Professor, Department of Biomedical and Diagnostic Sciences, University of Detroit Mercy School of Dentistry, Detroit, MI 48208, USA

Beauty lies in the eyes of the beholder. To paraphrase this quote to the field of dentistry, diagnosis lies in eyes of the dentist, who has to interpret radiographic images which lead to the diagnosis and ultimately to a definitive treatment plan. Radiographs produced in dental offices have to be of the highest describable quality so that interpretation of resultant images are worthy of the time spent making a diagnosis. Attempts to achieve the best quality images begin at the dental school among aspiring dental health professionals. Though most of the dental schools strive to teach acquisition of two dimensional intra-oral radiographs and interpretation of radiographic images, there are significant challenges. As far as production of high quality radiographs, students receive limited hands-on training in exposing, processing and evaluating radiographs. This is essentially due to the fact that curriculum handlers at the administrative level believe clinic time is effectively managed if students engage in performing and learning procedures such as fabrication of crowns etc. which are thought to be more remunerative than making radiographs or diagnosis there from. Secondly, dental schools differ largely in the allotted time spent during the dental curriculum to teach the art of radiographic interpretation to dental students to make them competent diagnosticians. *We will try to address these two issues separately*…

Teaching Image acquisition in the dental school setting involves pre-clinical hands-on demonstration of the technique of x-ray exposure, processing and self-evaluation of images after they have been mounted. This portion of the radiographic training is embedded early on during the dental curriculum and often not taught by trained oral and maxillofacial radiologists. Students matriculate to capturing images i.e. making radiographic exposures on patients during their clinical years in the program with sparse hands-on training they receive during the pre-doctoral training sessions. Even with substantial help during their program, students still graduate with unrelenting skepticism about their radiographic skills. But the notion that they can escape the act of performing radiographic procedures in their respective private practices or corporate practices where they are employed, gives them a sense of false security. It is noteworthy that dentists have to be well versed with the radiographic procedures to address issues that arise when dental auxiliaries they employ or work with, perform radiographic procedures. The articles in this special edition address pertinent issues related to producing high quality radiographs beginning with pre-doctoral radiology training at dental schools.

Image Interpretation is often a vital tool in the diagnostic armamentarium of any health care professional. Often, there is rigorous didactic training involving accumulation of knowledge of different disease conditions in the head and neck region with their respective pathological and radiological manifestations. However, there is limited training in helping the graduating dental student develop a systematic approach to image interpretation. So, in essence, the graduating dentist has a vast knowledge database of diseases but is not able to crystallize this data to develop an accurate differential diagnosis. For this to happen, adequate training should be given to hone the interpretive skills of the graduating dentist. The compilation of articles in this edition will throw light on the interpretive aspects of dentistry and methods to improve diagnostic

ISSN 2377-1623 Open Journal http://dx.doi.org/10.17140/DOJ-SE-1-e001

skills among dentists.

There comes a time when new and pragmatic approaches to image acquisition and interpretation have to be implemented in the dental. *That time is now*. That time is now because dental students, by and large, tend to continue to carry their radiographic skill sets derived from their tenure at dental school into private practice, after graduation. Newer methodologies and techniques to improve image evaluation and interpretation are needed to improve the diagnostic skills of the dental student and the practicing dentist. There are only a few opportunities available for the practicing dentist, in terms of Continuing Education Programs, to achieve this, after graduating from dental school. A selection of the current and relevant articles highlighting best practices in image acquisition and interpretation is published here as a compendium.

The goal of this special edition is to help dental professionals and those in training to equip themselves with novel approaches to image acquisition and interpretation, some of which are improvements to traditional practices in dental radiography. The author's hope that, by adopting trends described in this edition, dentists will be able to train the radiographic staff in their practices to minimize errors thereby limiting the number of re-takes, which in turn reduces the radiation dose to the patient. Also, survey results on the radiographic practices at dental schools, would help other dental schools and practices published here, establish robust radiology departments, which ultimately would serve interests of the patients at-large.

This special edition is edited by Dr. Ashok Balasundaram, Associate Professor, Radiology, Department of Biomedical & Diagnostic Sciences, University of Detroit Mercy School of Dentistry, Michigan, USA. The editor has assembled a series of remarkably comprehensive research articles in the area of educational practices in radiology education.